Innovations

A geographical perspective on driving attitudes and behaviour in Nigeria

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Abstract

Traffic accidents and related fatalities have become a major public health problem in the world. This paper is aimed at examining the geographical perspective on driving attitudes and behaviour in Nigeria. Most researchers have used the Theory of Planned Behaviour (TPB) in analysing significant factors concerning speeding behaviour. This paper also considered the use of this theory. While early studies did not shed much light on the role of personality traits in explaining behaviours that pose a risk to road safety, new methodological approaches and theoretical models have begun to emerge in recent decades to better study the relationship of personality traits to driver behaviour. Some theoretical models point out that certain drivers' personality traits can influence risky driving behaviours, either directly , or indirectly through attitudes dealing with road safety.

Keywords: 1.*Behaviour; 2.Attitude; 3.Geographical; 4.Driving; 5.Speeding; 6.Nigeria.*

1.0 Introduction

Road traffic accidents happen all over the world. However, in comparison to developed countries, the frequency of these crashes is higher in developing countries. According to global estimates, road traffic crashes claim the lives of approximately 1.35 million people each year, with an additional 20 to 50 million people suffering non-fatal injuries many of which result in various forms of disability (International Transport Forum, 2020, WHO, 2021).

According to Ukoji (2014), unsafe driving behaviours account for up to 90% of crashes in Nigeria, including inappropriate speeding and speed – related factors, a lack of understanding of traffic regulations, including road signs and markings, drink driving, dangerous driving, driver fatigue, and inappropriate overtaking, individuals quality of life, social and economic activities and the nation's overall economic activity are all affected by crashes.

There are thousands of Nigerians who have become permanently deformed and disabled due to loss of one body part or another in road accidents they were involved in at various points. It is alarming that auto crashes, especially on Nigerian highways, are on the rise on a daily basis showing no sign of abating, at least, not in the near future. On one hand, the frequent crashes have also become stumbling blocks towards achieving natural security in the country (Atubi, 2017, 2018, 2020a, 2020b, 2020c, 2022 and Modibo, 2021).

According to Qu et al, (2014), driver's abnormal driving habits appear to be greater and more direct predictors of road crash risk than driving anger. Risky and aggressive driving behaviours, such as speeding or running red lights, accounted for nearly 94.4% of all road deaths in China. It's been proven that driving rage and erratic driving habits are linked (Zhang & Chen, 2016). Anger has been shown to interfere with human cognitive functions such as attention (Schimmack & Derryberry, 2005) and judgement (Evans, 2008), leading to exaggerated optimism and poor danger perception in angry people. As a result, drivers who have expressed a higher

level of rage on the road are more likely to commit traffic offences (such as tailgating and speeding) (Abdu et al, 2012; Obafemi & Obafemi, 2021).

A contributory factor to increased crashes in Nigeria is the increase in private vehicle ownership. The National Bureau of Statistics (NBS, 2018) estimates the number of officially registered vehicles in Nigeria at 11,760,871 vehicles, of which 6,785,956 (1.3%) are government owned, while 6194 (0.1%) are diplomatic vehicles. More importantly, 90% of road traffic crashes (RTC) are caused by road user behaviour (Petridou et al, 2000; Hingson et al, 1996). Hingson, et al, (1996), also suggests that changes in driver behaviours offer the largest opportunity towards the reduction of road traffic crashes.

However, a daunting report by the Federal Road Safety Corps (FRSC) indicated that the corps recorded not less than 22,320 road traffic crashes (RTCS) involving 36,031 vehicles with 5,471 deaths in Nigeria. It is estimated that about 15 persons die in Nigeria on a daily basis due to road traffic accidents or four person every six hours, or 426 per month (FRSC, 2021). The figures really indicated a terrifying situation. Comparatively, Nigeria's road traffic deaths and injuries are some of the highest in any country. The global average stands at 17.4; the African average is 26.6 of 100,000 inhabitants. Norway, which has the safest roads, has a 2.0 casualty rate per 100,000 persons. Zimbabare has the highest road death rate in the world with average pegged at 74.5 per 100,000 (FRSC, 2021).

The human system is complex, dynamic and interrelated (Ojiakor et al, 2019). There close association and influence among varying human behaviours including driving behaviour, since the later influence driving safety. Road user behaviour vary from new (planned) behaviour to habitual behaviour. Certain habitual road user behaviours can be altered by applying behaviour change strategies in such a way that seizes the underlying motive and therefore enables road users to detect the changes in the traffic situation but risk driving habits will not disappear overnight when drivers become aware of unsafe driving habits and the associated safety risks, they can identify it themselves and correct it.

Evans (1991) and Elander et al, (1993) have proposed that human factors are composed of two separate components; driving skills (performance) and driving style (behaviour). Driving skill is the information processing, motor and safety skills that were perceived to improve with practice and training. It reflects what drivers can do. While driving style (behaviour) refers to the way drivers choose to drive or usually drive including for example the choice of speed, driving for thrill or fun, attentiveness, lane changing, gap acceptance etc. As reported by Evans (1996), driver behaviour has a much greater influence on safety than driver performance. Given that risky driving is a major contributor to road crashes, reducing level of risky driving would go a long way to reduce the incidence of crashes and injury on the roads.

2.0 **Road Safety Profile of Nigeria**

The latest Nigeria's National Security Strategy 2019, recognised land transportation as a vital aspect of the socio-economic well being of Nigeria. It is a major facilitator of growth and development, tourism, education, health and socio-economic development thus making it an enabler of national security. The land transportation system covers about 204,000km of roads and accounts for over 80 percent of the national transportation needs (Atubi, 2021a, 2021b; Modibo, 2021).

With an estimated population of 190 million (NBS, 2019), Nigeria is Africa's most populous nation and the seventh most populous country in the world. Road traffic crashes (RTCs) have been identified as a major public health problem in Nigeria and as such requires urgent attention as not much success in tackling this problem has been achieved.

The World Health Organisation indicated that road traffic accidents cost low – and – middle – income countries between 1.0 and 2.0 percent of their Gross National Product annually. This is more than the development aid the countries receive. The Federal Road Safety Corps (FRSC) put the economic losses to road traffic crashes at 9.8 billion (WHO, 2020, FRSC, 2018). In

Nigeria, most of the highways are not motor-able, filled with a lot of potholes and therefore, unsafe at any speed.

The differences in statistics of casualties provided by the FRSC and WHO has revealed the under – reporting and unreliability of crash data in Nigeria. Studies have consistently pointed these out for developing countries (Ameratunga et al, 2006), and Nigeria is not an exception (Fig 1.)

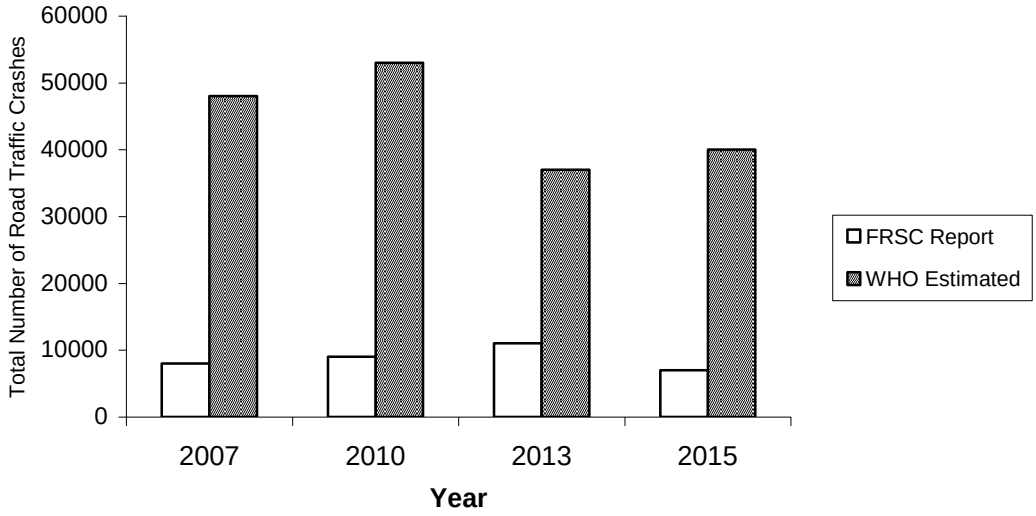

Fig. 1: Reported and estimated number of road traffic fatalities for selected years in Nigeria (WHO, 2010; 2013; 2015) adapted from Uzondu, C. (2019)

While there has been a downward trend in road traffic fatalities in some high-income countries (HICs), the situation is different in low – and – middle – income countries (LMICs) such as Nigeria, where limited resources and attention has been given to road safety. For example, HICs such as Sweden, the US and the UK have reduced road traffic fatality rates per 100,000 population from levels varying between 0.47 and 1.26 in 2013 to rates of 0.46 and 1.25 in 2016. Road traffic fatalities in LMICs like Nigeria, Pakistan, and Uganda are still very high (WHO, 2018; Uzordu, 2019). Figures 2 and 3 shows these numbers and compare the data with other HICs and LMICs.

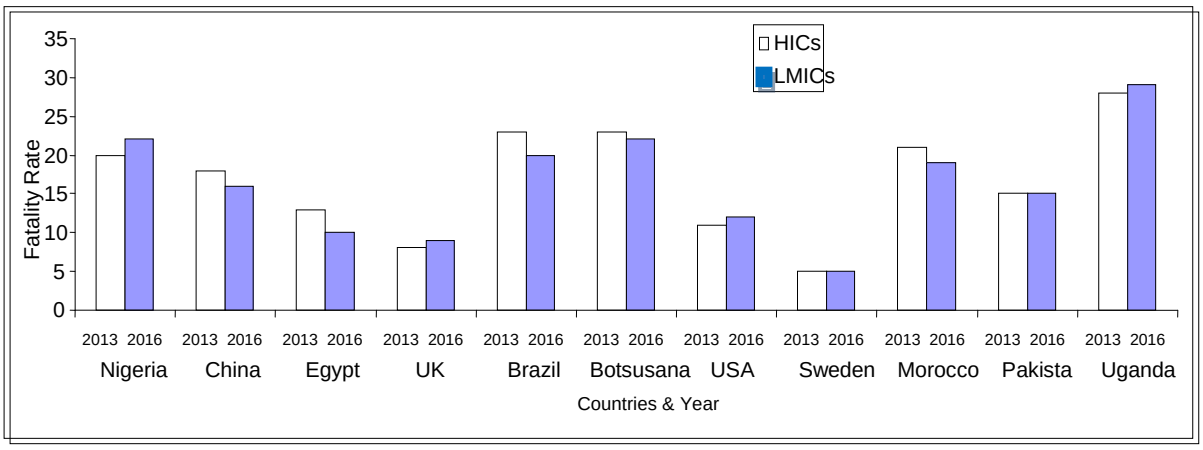

Fig. 2: Road traffic fatality rate per 10,000 vehicles (WHO, 2015 & 2018; Adapted from Uzondu, 2019)

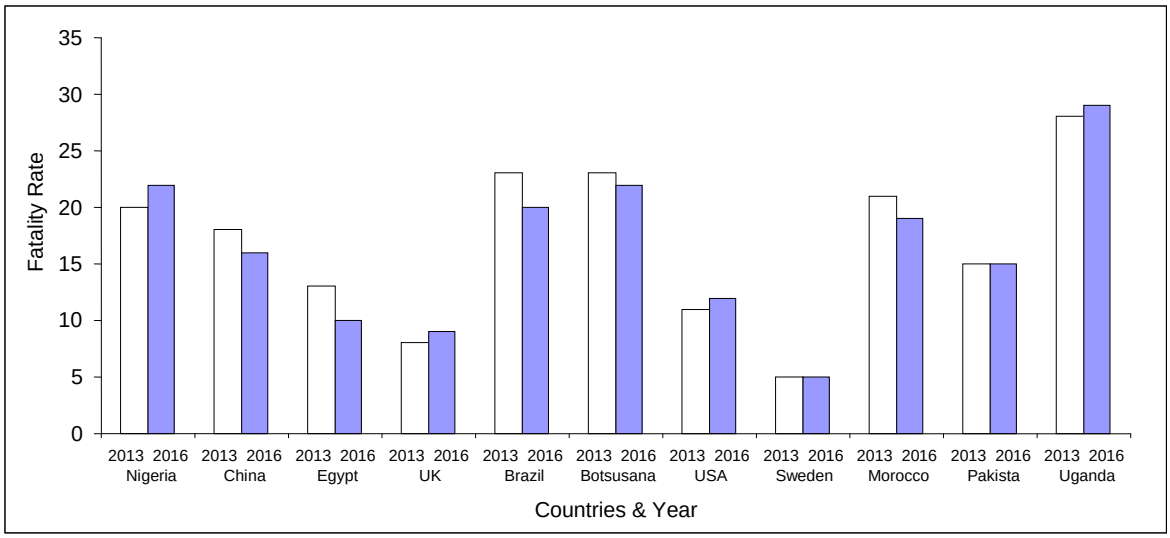

Fig. 3: Road traffic fatality rate per 10,000 population (WHO, 2015 & 2018; Adapted from Uzondu, 2019)

The cost of crashes in the developing world often exceeds the amount of payment that those countries receive in financial aid. It also points that because of poor reporting and lack of a control data system, we don't know as much as we would like about cost of crashes in many less developed countries (Together for Safer Roads, 2022). Countries that do not invest in road safety could miss out on anywhere between seven and 27 percent in potential per capital GDP over a 24 year period. This should be a warning to Nigeria that has one of the highest accident fatality rate in the world. It should also compel Nigeria to begin to design programmes and polices to make our roads safe for travellers (This Day, 2019).

A better understanding of the situation in Nigeria when compared with other HICs and LMICs in terms of fatality rate, level of motorization etc is in Table 1. With a mush smaller number of registered vehicles in 2016, Nigeria reported the highest fatality per 10,000 vehicles compared with China, the UK, Brazil, USA, Iran and Turkey which had higher number of registered vehicles (Table 1)

Table 1: Comparison of Fatality and motorization level for selected developed and developing countries (WHO, 2015; 2018).

Country	Year	Person Injured (Reported)	Person Killed (Estimated)	GNT per Capita in SUS	Income Level	Number of Registered Vehicles	Deaths Per 100,000 Population	National Population	Deaths per 100,000 population
Nigeria	2013	6,450	35,641	2,710	Middle	5,791,446	61.54	173,615,345	20.5
	2016	5,053	39,802	2,450		11,733,425	33.92	185,189,632	21.4
China	2013	58,539	261,367	6,560	Middle	250,138,212	10.49	1,385,566,537	18.8
	2016	58,022	256,180	8,260		294,694,457	8069	1,411,415,375	18.2
Egypt	2013	6,700	10,466	3,140	Middle	7,037,954	15.24	82,056,378	12.8
	2016	8,211	9,287	346		8,412,673	11.04	95,688,680	9.7
UK	2013	1,770	1,827	41,686	High	35,582,650	0.5	63,136,265	2.9
	2016	1,804	2,019	42,390		38,388,214	0.53	65,788,572	3.1
Brazil	2013	41,059	46,935	11,690	Middle	81,600,729	0.57	200,361,925	23.4

	2016	38,651	41,007	8,840		93,867,016	4.37	207,652,864	19.7
Botswana	2013	411	477	7,770	Middle	520,793	9.16	2,021,144	23.6
	2016	450	535	6,610		653,274	8.19	2,250,260	23.8
USA	2013	32,719	34,064	53,470	High	265,043,362	1.26	32,050,716	10.6
	2016	35,092	39,888	56,180		281,312,446	1.25	3,221,796,161	12.4
Sweden	2013	260	272	60,760	High	5,755,952	0.47	9,571,105	2.8
	2016	270	278	54,630		6,102,914	0.46	9,837,533	2.8
Morocco	2013	3,832	6,870	3,020	Middle	3,286,421	20.91	33,008,150	20.8
	2016	3,785	6,917	2,850		3,791,469	18.24	35,276,784	19.6
Pakistan	2013	7,636	25,781	1,389	Middle	9,080,437	28.39	1,814,594	14.2
	2016	4,448	27,582	1,510		18,352,500	18.03	193,203,876	14.3
Uganda	2013	41,851	10,280	550	Low	1,228,425	83.68	37,578,876	27.4
	2016	3,503	12,036	660		1,594,962	75.46	41,487,964	29

Source: (WHO, 2015 & 2018; Adapted from Uzondu, 2019.

In view of the overwhelming challenges generally affecting transportation in Nigeria, road safety research has only recently started gaining the desired attention from the government. The Federal Government of Nigeria (FGN) is committed to the reduction of road traffic crashes (RTC), complimented by the delivery of a safe road transport system for all classes of road users. However, despite the causable efforts of the FGN, Road Traffic Crashes (RTC) and fatalities are still relatively high, is which a pointer to the fact that the country is yet to get it right (Sumaila, 2013; Siyan et al, 2019; Atubi, 2022).

3.0 Theoretical Framework

The following theories have been identified as relevant to the study:

1. Theory of planned behaviour
2. Transactions theory of driver behaviour
3. Theory of habitual behaviour

3.1 Theory of Planned Behaviour

The theory of planned behaviour is an extension of the theory of reasoned action (Ajzen & Fishbein, 1980) made necessary by the original models limitations in dealing with behaviours over which people have incomplete volitional control. Fig. 4 depicts the theory in the form of a structural diagram. For ease of presentation, possible feedback effects of behaviour on the antecedent variables are not shown. As in the original theory of reasoned action, a central factor in the theory of planned behaviour is the individuals' intention to perform a given behaviour. Intentions are assumed to capture the motivational factors that influence a behaviour; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour. As a general rule, the stronger the intention to engage in a behaviour, the more likely should be its performance. It should be clear, however, that a behavioural intention can find expression in behaviour only if the behaviour in question is under volitional control, i.e., if the person can decide at will to perform or not perform the behaviour.

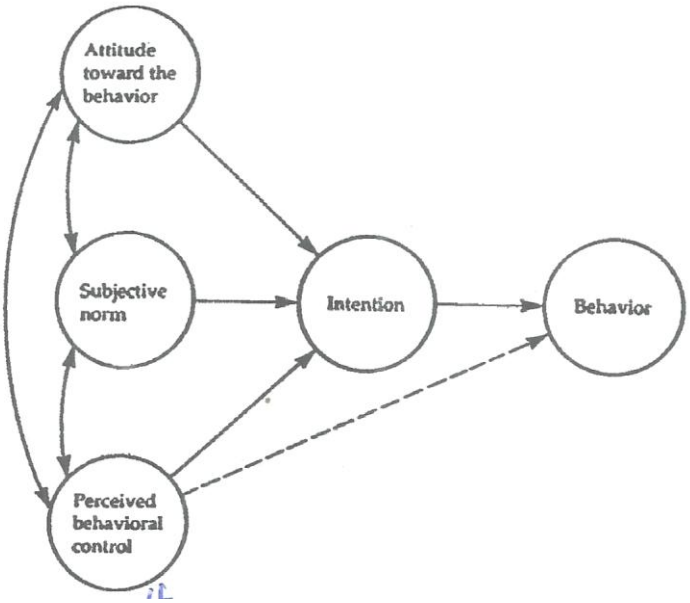

Fig. 4: Theory of Planned Behaviour (Source: Ajzen, 1985)

Although some behaviours may in fact meet this requirement quite well, the performance of most depends at least to some degree on such non-motivational factors as availability of requisite opportunities and resources (e.g., time, money, skills cooperation of others (Ajzen, 1985). Collectively, these factors represent peoples actual control over the behaviour. The idea that behavioural achievement depends jointly on motivation (intention) and ability (behavioural control) is by no means new. It constitutes the basis for theorizing on such diverse issues as animal learning (Hull, 1943), level of aspiration (Lewin et al., 1944), performance on psychomotor and cognitive tasks (Vroom, 1964; Locke, 1965), and person perception and attribution (Heider, 1944; Anderson, 1974). It has similarly been suggested that some conception of behavioural control be included in our more general models of human behaviour, conceptions in the form of facilitating Factors' (Triandis, 1977), the context of opportunity (Sarver, 1983), resources (Liska, 1984), or action control (KuhI, 1985).

The assumption is usually made that motivation and ability interact in their effects on behavioural achievement. Thus, intentions would be expected to influence performance to the extent that the person has behavioural control, and performance should increase with behavioural control to the extent that the person is motivated to try. Interestingly, despite its intuitive plausibility, the interaction hypothesis has received only limited empirical support (Locke et at., 1978).

3.2 Transactions Theory of Driver Behaviour

Transactional theories suppose that stress arises out of individual cognitions of specific transactions or encounters between person and environment. In the driving context, stress outcomes may be generated by the driver's cognitive appraisals that the demands of the task tax or exceed the driver's capabilities and coping resources. Several distinct cognitive processes contribute to an evaluation of this kind, including appraisal of task demands and personal competence, and selection and implementation of coping strategies. Mathews (2002) suggests that the driver's appraisal of coping reflects the interaction of person and environmental factors. Person factors refer to personality traits related to stress vulnerability. Individuals with an anxious or neurotic personality are generally more vulnerable to stress, but in practice, the persons that are most likely linked to driver stress are specific to the driving context (Dorn & Mathews, 1995). Thus the transaction model provides a good theoretical framework for studying driver behaviour on a situation specific level. Mathews (2002) provides a good example of how

inherent tendencies influence driver behaviour in specific situations. Drivers manifest anxiety (from a predisposed dislike for driving) or anger or aggressive tendencies in specific situations, and drive accordingly.

Inherently angry drivers are more inclined to make hostile traffic situation evaluations and consequently drive faster, make more mistakes and take more overtaking risks. Anxiety prone drivers make task difficulty evaluations and use more cautions in highly demanding tasks. But these drivers make errors when demand is low because they shift attention away from the driving task into their current anxious feelings. Fig. 5 illustrates how driver-related traits influence stress responses to environmental stressors such as poor roads, heavy traffic and dangerous driving from other drivers. It also shows the multi-dimensional state perspectives adopted by contemporary research to delineate various distinct subjective and physiological state dimensions (Mathews et al., 2005)

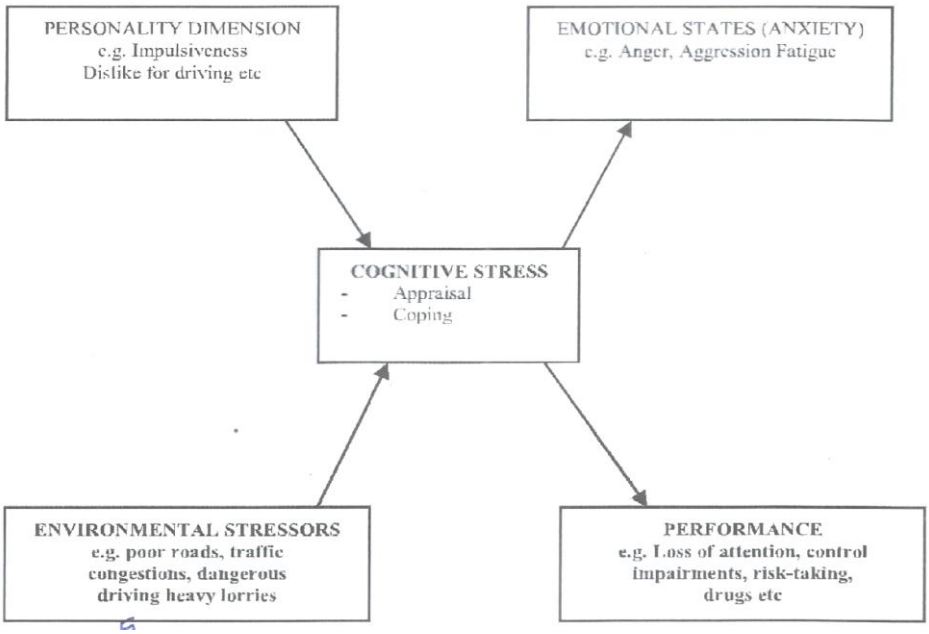

Fig. 5: Driver-related traits influence stress responses to environment (Source: Adapted from Mathews et al.2005)

According to Mathews et al. (2005), the three dimensions of driver behaviour that have proved to be most predictive of stress state are dislike of driving, aggression and fatigue-proneness. Dislike of driving relates both to distress and worry, including task related cognitive interference. It also relates to a preference for coping through confrontive behaviour such as horn-honking, tailgating and making gesture. The other driver stress factors relate to preferred methods of coping which include emotion- focus in the case of fatigue or confrontive coping in the case of thrill seeking. Clearly, the transactional model can be employed to explain variations in driver behaviours. In that regard, Mathew et a!. (2005) suggest that the key cognitive stress process may influence performance directly or indirectly

3.3 Theory of Habitual Behaviour

This theory argues that if people conduct themselves frequently without previous specific deliberation, their activity is normal. Therefore, when individuals first behave in a particular manner, they typically determine what to do and how to achieve those outcomes and prevent certain consequences. However, when such acts are replicated in the same way, clear rational decision – making reduces and behaviour is related to the setting (Verplanken & Wood, 2006). Almost all behaviour (95% of behaviour) is a form of habitual behaviour (Wagenaar & Beck, 1992). When road users can observe from the environment what behaviour are expected

from them (such as speed) and what other road users' behaviour can be expected (such as overtaking, merging), traffic is more predictable and consequently more safe (Aarts & Van Schagen, 2006) (See Fig. 6).

Fig. 6: A Schematic Illustration of Habitual Behaviour (Source: Culled from Verplanken & Wood 2006)

This theory applies to the present study as it explains the reasons behind the behaviour of drivers in a particular manner in Nigeria. Most of the behaviour of drivers in Nigeria is without explicit deliberation beforehand. This behaviour has become habitual as their repeated actions within the same context have decreased their explicit conscious decision making and the actions have come to be cured by the environment.

4.0 Relationship between Attitude and Behaviour

Attitudes, risk perception and behaviour have been found to be related to each other and to traffic safety within traffic psychology. This attitude – behaviour traffic safety relationship has been an old phenomenon that has been widely analysed with theories such as the theory of planned behaviour (TPB) and the theory of habitual behaviour (THB) in developed countries (Parker et al, 1992; Iversen and Rundmo, 2004; Eiksund, 2009; Forward, 2009b). Attitudes have often been defined to mean tendencies to evaluate an object with some degree of favour or disfavour, expressed in affective, cognitive or behavioural responses (Eagly and Chaiken, 1993).

Numerous studies have illustrated how risky driving behaviour plays a major role in the occurrence of road traffic crashes (RTCs), leading to the consensus that changes in driver behaviour is one of the points for traffic interventions (Evans, 1996; Parker et al, 1995; Evans, 2004; Taylor et al, 2000). One of the approaches considered to be effective and long lasting is to change attitudes traffic safety (Manstead and Parker, 1995; Trafimow and Fishbein, 1994). The rational of this attitudes – behaviour – outcome model assumes that risk taking attitudes correlate with risk – taking behaviour, which in turn predicts RTCs. Although the potential of this model is often advocated and sometimes used in traffic safety campaigns (Forward, 2006; Aberg et al 1997; Parker et al, 1992).

As a major human factor, driver attitudes towards road traffic safety, referred to as positive or negative evaluation of road traffic behaviours and regulations, has been found to be associated with risky driving behaviour in several studies. Most research on the safety behaviour of road users has focused on their attitudes. Thus road users' attitudes have been acknowledged as a key predictor of their behaviour. Shiraev and Levy (2010), maintained that attitudes are comprised of beliefs (e.g. political, ideological, religious, moral), values, knowledge, opinions and superstitions. It is generally assumed that attitude, as a function of believe about the perceived consequences of the behaviour under consideration, is a determination of intended behaviour; the individual's intention be engaged in a particular behaviour is believed to have a direct effect on behaviour. Sheeren et al (1999) and Nordfjaern and Rundmo (2009) pointed out that attitudes are strong predictors of behaviour, as they mediate the relationship between personality characteristics and risky driving behaviours. Similarly Ulleberg and Rundmo (2003) and Iversen and Rundmo (2004) concludes that attitudes towards road safety have an impact on the involvement of risky behaviours in the road environment. Drivers' attitudes and behaviour have been widely recognised in the literature to be correlated to traffic violations, which in turn, were found to increase crash risk (Dewinter & Dodou, 2010).

5.0 Causative Factors in Road Traffic Crashes

Understanding underlying factors leading to crashes are very important when planning effective crash reduction and prevention measures, and this requires obtaining accurate information about the problems involved. Researches are continually searching for ways to gain a better understanding of factors that affect crash occurrence (Savolainen et al, 2011; Lord & Mannering, 2010; Atubi, 2014, 2007b, 2012x, 2011a, 2012a, 2020a, 2020b, 2021a and 2021b)

Atubi (2020a) revealed that most of the road traffic accidents in Nigeria were caused by the carelessness of drivers, poor vehicle maintenance, inadequate road traffic signs and markings, and unfavourable climatic conditions; indicating that influence of alcohol and use of phones while driving constituted the minor causes of road traffic accidents. The important thing was human factors responsible for accidents in Nigeria were over speeding, rash driving, not following traffic rules, carelessness while crossing roads, playing on road, alcohol intake, fatigue and sleepiness (Atubi and Gbadamosi, 2015). Over speeding, over loading and disregard to road signs or regulations were the first three main road traffic accident causing factors in Nigeria (Atubi and Onokala, 2009).

Afolabi and Gbadamosi, (2017) in a review of crash reports, stated that human, mechanical, and environmental characteristics are the salient factors of RTC in Nigeria, Uzondu et al, (2019), in an observational study, reported that the incorrect use of indicators and tailgating were the two road user behavours that were prevalent among road users in Owerri, Imo State, Nigeria.

Table 2 shows the main causes of road traffic crashes in Nigeria according to the FRSC in 2018 and 2019. The top 3 identified causes of crashes are speed related factors (speed violation, loss of control, and dangerous driving) which accounts for 57.8% of all causes of crashes in Nigeria in 2018. The top 5 factors identified in table 5 all relate to driving behavour, which is a confirmation of the suggestion by Hingson et al, (1996) that changes in driver behaviours offers the largest opportunity towards the reduction of road traffic crashes (See Table 2 and 3).

Table 2: Causes of Road Traffic Crashes (RTC) in Nigeria

Causes	Number of Crashes	%
Speed violation	3848	33.9
Loss of control	1753	15.4
Dangerous driving	969	8.5
Wrongful overtaking	832	7.3
Sign/light violation	736	6.5
Tyre burst	689	6.1
Route violation	591	5.2
Break failure	567	5.0
Mechanically deficient vehicle	316	2.8
Others	246	2.2
Road obstruction violation	182	1.6
Dangerous overtaking	144	1.3
Bad road	124	1.1
Over loading	99	0.9
Sleeping on steering	78	0.7
Fatigue	73	0.6
Driving under alcohol/drug influence	57	0.5
Use of phone while driving	32	0.3
Poor weather	27	0.2
Total	**11363**	**100**

Source: FRSC, (2018)

Table 3: Causes of Road Traffic Crashes (RTC) in Nigeria

Causes	Number of Crashes
Speed violation	44
Loss of control	12
Dangerous driving	8
Wrongful overtaking	7
Tyre burst	6
Break failure	5
Routes violation	5
Others	11

Source: FRSC, (2019)

Driver factors account for up to 90% crashes in Nigeria; this includes inappropriate speeding and speed – related factors, poor knowledge of traffic regulations including road signs and markings, drink driving, driver fatigue, wrongful overtaking etc. The fist four which are linked to driver behaviour have consistently been the highest probable cause of road traffic crashes in Nigeria in a long time.

Atubi (2010c) examined the variance spectra of road traffic crashes in Lagos State, Nigeria and found that more than 90% of road traffic crashes in Lagos State could be contributed to over speeding and recklessness on the part of drivers. Drinking and driving has been identified as a problem which requires a multi-dimensional coordinated approach if it is to be effectively addressed.

Similarly, Olajuyigbe et al (2014) found human factors as the major cause of crashes in all the districts of the city of Abuja, Nigeria. These human factor include dangerous driving, wrong over taking, speed, loss of control and fatigue. This is followed by road factor which is essentially the nature of the road. This agrees with the findings of Hirasawa and Asano (2003) who reported that the high rate of fatal accidents and the sharp increase in the last ten years of road accidents in Hokkaido, Northern Japan could be attributed to changes in road surface conditions. Other unobserved causes are vehicle factors (brake failure, tyre burst and abandoned vehicle) and environmental factors including bad weather conditions that often affect visibility thereby causing poor vision to the drivers.

In a study of the determinants of road traffic accidents among commercial vehicle drivers in Gboyin Local Government Area of Ekiti State, Nigeria, Ojo (2015) revealed that driving under the influence of alcohol was the most significant determinants of road traffic accidents. Other significant different were excessive speeding, indiscriminate parking, impressionistic, driving, and sleepiness.

Using mostly secondary data on vehicular accidents obtained form the Nigeria police force and federal road safety commission, Atubi (2018) examined a forty-five year review of number of injured from road traffic accident (1970-2015) in Lagos State. The result showed that the proportion of variation in the number of injured from road traffic accidents explained by the independent variable of length of roads, presence of road safety and population was 41%. The results specifically showed that the higher the length of roads (km) the more the number of injured from road traffic accidents while the number of injured decreases with increase in population. The study indicated that the presence of road safety had positive but not significant effects on the number of people injured from road traffic accidents.

6.0 Road safety and improved drivers' behaviour in Nigeria

Several factors contribute to road traffic crashes in Nigeria. Obedience to the traffic rules and driving in a disciplined way can help drivers to know and protect each other's movement. To drive a vehicle safety requires that one must possess specific skills that must be learnt properly. When one drives with the right skills, there is a higher chance that the person will be safe and

getting into a crash is reduced to an extent. To improve the safety performance of drivers, training and education are very important. Driving is a profession that requires total concentration. Every driver should know the basic rules and regulations of driving. This is necessary in order to ensure good driving culture.

In Nigeria, the Federal Road Safety Commission is mostly responsible for developing these measures. In response to the UN decade of action for road safety, FRSC launched "safe road in Nigeria" with the calm of reducing road crash deaths and injuries by 50% by 2030. It is based more on changing driving behaviour than advocating for good road infrastructure. The FRSC has stepped up the campaign in Nigeria to ensure that these objectives are met by strengthening legislation and enforcement in the following areas:

i. Drink Driving

This is universally believed to be unacceptable and a serous threat to traffic safety. The maximum authorised blood alcohol content (BAC) in Nigeria is 0.5g/i. FRSC (2015) shows that driving under the influence of alcohol accounted for an estimated 1% of the total cause of vehicle crashes in the country in 2012. Recently there have been efforts to amend the maximum BAC to 0.2g/I for novice drivers (less than one year driving experience) and 0.01 g/l for commercial drivers. The dangers inherent in driving under the influence of alcohol include impaired vision, poor sense of judgement, indulging in excessive speed etc. The FRSC has been organising and running publicity campaigns against drink – driving with private sector support, but enforcement of the law is still very weak and need to be strengthened.

ii. Speeding

Speed violation and inappropriate speed have been identified as a major contributor to road traffic crash in Nigeria. Current national speed limits on Nigerian roads are as follows: Urban roads: 50km/h, Rural roads: 80 km/h and expressways: 100 km/h. Ironically, only very few Nigerian drivers are aware of the different speed limits because most of them do not have the required training and tests before obtaining a driver's licence and will not on their own go through the highway code. In addition to these, most roads have no speed limit signs at all. Consequently, in 2016 the compulsory installation and use of speed limiting devices were introduced to commercial vehicles in the first instance, although enforcement and compliance began in 2017. There is a plan to extend this to private vehicles pending success with the commercial drivers. An increase in average speed is directly related both to the likelihood of a crash occurring and to the severity of the consequences of the crash. For example, every 1% increase in mean speed produces a 4% increase in the fatal crash risk and a 3% increase in the serious crash risk. The death risk for pedestrians hit by car fronts rises rapidly (4.5 times from 50km/h to 65km/h). In car-to-car side impacts the fatality risk for car occupants is 85% at 65km/h.

iii. ***Seatbelt Use***

Seat belts are highly effective in protecting vehicle occupants and significantly reduce their risk of being fatally or seriously injured in the event of a crash (Cummings et al, 1995; Evans 1996; Atubi, 2013). The seatbelt policy was made compulsory in Nigeria in 2003, which makes it an office for front seat occupants of vehicles not to war seat belts (Atubi, 2006 and 2013) while the enforcement for rear seat occupants started in 2015. The law is exclusively enforced by the FRSC.

iv. Education and Training

Driver education (and training) is a common approach to improving road safety as the aim is to change the risky behaviour of the driver. The general premise of driver training is that lack of knowledge about safe driving and/or inappropriate attitudes are responsible for unsafe

behaviours which often lead to road crashes. Therefore, the primary goal of driver training should be to increase knowledge and ensure that road users drive safely. There is substantial evidence that driving skills improve during training and several studies have suggested that higher order skills such as risk – assessment, hazard perception, situational awareness and the development of a responsible attitude contribute more to reducing crash risk than advanced driving skills (Hatakka et al, 2003; Bates et al, 2014; Atubi, 2014). Driver training and education should occur within an evidence – based holistic and life long driver licensing system, such as graduated driver licensing, with a developmental curriculum providing support and legitimacy for the things that do reduce risk.

v. Enforcement

Enforcement is based on the principle that people try to avoid penalties. People have the impression that there is a high chance that they will be penalised when violating a rule. The subjective chance of apprehension is primarily affected by the actual level of enforcement which is affected by how much people see or hear about enforcement. Therefore, the chance of apprehension can be increased by applying enforcement, publicising specific enforcement activities and by feedback on the results of enforcement activities (Atubi and Gbadamosi, 2015; Atubi, 2021b).

Improvements of traffic law enforcement have been shown to lead to rapid reductions in deaths and injuries when best practice is applied. Thus it should be part of an integrated road safety policy. One of the recommendations highlighted in the WHO (2018) was about enforcement.

Conclusion

The continuous increases in the numbers of road traffic crashes (RTCs) over the years, especially in developing countries, have been a source of worry. The majority of the RTCs are attributed to road user behaviours exhibited by the drivers. Traffic violations are recognised as one of the main causes of traffic accidents and have been found to be closely associated with drivers behaviours and attitudes. Also, speeding is one of the risky behaviours which results in accident involvement causing fatalities and severe injuries. At present, the domestic and foreign literature on risky behaviour mainly focuses on attitude, cognition, risk perception, personality and risk tolerance.

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